a count of a number of previous transmissions of the advertising channel messages by the sender to reduce connection latency in high device population environments;

[0151] Step **454**: computing a total time interval consumed by the sender in previous transmissions of the advertising channel messages, based on the received descriptive information regarding the time interval available to the sender for transmission of advertising channel messages and the count of the number of previous transmissions of the advertising channel messages by the sender; and

[0152] Step **456**: adjusting, by the apparatus, an amount of time for receiving advertising channel messages, based on the computed total time interval consumed by the sender in previous transmissions of the advertising channel messages.

[0153] FIG. **5** illustrates an example embodiment of the invention, wherein examples of removable storage media are shown, based on magnetic, electronic and/or optical technologies, such as magnetic disks, optical disks, semiconductor memory circuit devices and micro-SD memory cards (SD refers to the Secure Digital standard) for storing data and/or computer program code as an example computer program product, in accordance with at least one embodiment of the present invention.

[0154] Using the description provided herein, the embodiments may be implemented as a machine, process, or article of manufacture by using standard programming and/or engineering techniques to produce programming software, firmware, hardware or any combination thereof.

[0155] Any resulting program(s), having computer-readable program code, may be embodied on one or more computer-usable media such as resident memory devices, smart cards or other removable memory devices, or transmitting devices, thereby making a computer program product or article of manufacture according to the embodiments. As such, the terms "article of manufacture" and "computer program product" as used herein are intended to encompass a computer program that exists permanently or temporarily on any computer-usable medium or in any transmitting medium which transmits such a program.

[0156] As indicated above, memory/storage devices include, but are not limited to, disks, optical disks, removable memory devices such as smart cards, SIMs, WIMs, semiconductor memories such as RAM, ROM, PROMS, etc. Transmitting mediums include, but are not limited to, transmissions via wireless communication networks, the Internet, intranets, telephone/modem-based network communication, hard-wired/cabled communication network, satellite communication, and other stationary or mobile network systems/communication links.

[0157] Although specific example embodiments have been disclosed, a person skilled in the art will understand that changes can be made to the specific example embodiments without departing from the spirit and scope of the invention.

1-22. (canceled)

23. A method, comprising:

creating, at an apparatus, operating parameters for a wireless data channel connection and descriptive information regarding a time interval available to the apparatus for transmission of advertising channel messages and a count of a number of previous transmissions of the advertising channel messages to reduce connection latency in high device population environments;

transmitting, by the apparatus, one or more wireless advertising channel messages indicating presence of the wireless data channel connection, the operating parameters associated with the wireless data channel connection, and the descriptive information regarding the time interval available to the apparatus for transmission of advertising channel messages and the count of the number of previous transmissions of the advertising channel messages; and

transmitting, by the apparatus, information on the wireless data channel connection according to the operating parameters.

24. The method of claim **23**, wherein the wireless advertising channel messages are is transmitted on a Bluetooth Low Energy advertising channel and messages transmitted on the wireless data channel connection are transmitted on a Bluetooth Low Energy data channel.

25. The method of claim **23**, wherein the wireless advertising channel message includes an advInterval value indicating the time interval available to the apparatus for transmission of advertising channel messages.

26. The method of claim **23**, further comprising:

entering, by the apparatus, a connected state with another device responding to the advertising channel messages; and

resetting, by the apparatus, the count of the number of previous transmissions of the advertising channel messages, after the apparatus enters the connected state.

27. The method of claim **23**, wherein the operating parameters included in the wireless advertising channel messages enable a receiving device to receive the descriptive information transmitted on the wireless data channel connection.

28. A method, comprising:

receiving, by an apparatus, one or more wireless advertising channel messages that include descriptive information regarding a time interval available to a sender for transmission of advertising channel messages and a count of a number of previous transmissions of the advertising channel messages by the sender to reduce connection latency in high device population environments;

computing a total time interval consumed by the sender in previous transmissions of the advertising channel messages, based on the received descriptive information regarding the time interval available to the sender for transmission of advertising channel messages and the count of the number of previous transmissions of the advertising channel messages by the sender; and

adjusting, by the apparatus, an amount of time for receiving advertising channel messages, based on the computed total time interval consumed by the sender in previous transmissions of the advertising channel messages.

29. The method of claim **28**, wherein the amount of time for the apparatus receiving advertising channel messages is based on a scanWindow duration and a scanInterval; and

the scanWindow is increased if the computed total time interval is less than the scanInterval and greater than the scanWindow.

30. The method of claim **28**, wherein the amount of time for the apparatus receiving advertising channel messages is based on a scanWindow duration and a scanInterval; and

the scanWindow duration is increased and the scanInterval is decreased if the computed total time interval is greater than the scanInterval.